

What is claimed is:

- 1 1. A process for rinsing and drying a substrate on a semiconductor wafer, comprising the
2 steps of:
3 dispensing rinsing fluid on the substrate during a rinsing cycle; and
4 spinning the wafer about an axis of rotation during a drying cycle to dry the wafer, while
5 dispensing dry gas under pressure against the substrate to dry the wafer completely.
- 1 2. The process of claim 1, further comprising the steps of:
2 dispensing the rinsing fluid on a surface of the substrate near the axis of rotation during
3 the rinsing cycle; and
4 dispensing the gas on the surface of the substrate near the axis of rotation during the
5 drying cycle.
- 1 3. The process of claim 1, further comprising the steps of:
2 dispensing the rinsing fluid through a first nozzle mounted on a robot arm; and
3 dispensing the gas through a second nozzle mounted on the robot arm.
- 1 4. The process of claim 1, further comprising the steps of:
2 pointing a first nozzle to the substrate near the axis of rotation while dispensing the
3 rinsing fluid through the first nozzle; and
4 pointing a second nozzle to the substrate near the axis of rotation while dispensing the
5 gas through the nozzle.
- 1 5. The process of claim 1, further comprising the steps of:
2 moving a robot arm on which a first nozzle is mounted to point the first nozzle at the
3 substrate while dispensing the rinsing fluid during the rinsing cycle; and
4 moving the robot arm on which a second nozzle is mounted to point the second nozzle at
5 the substrate while dispensing the gas during the drying cycle.
- 1 6. The process of claim 1, further comprising the steps of:
2 opening and closing a motor controlled first valve during the rinsing cycle to dispense the
3 rinsing fluid; and

4 opening and closing a motor controlled second valve during the drying cycle to dispense
5 the gas.

1 7. The process of claim 1, further comprising the steps of:
2 moving a robot arm on which a first nozzle is mounted to point the first nozzle at the
3 substrate while dispensing the rinsing fluid during the rinsing cycle;
4 opening and closing a motor controlled first valve during the rinsing cycle to dispense the
5 rinsing fluid;
6 moving the robot arm on which a second nozzle is mounted to point the second nozzle at
7 the substrate while dispensing the gas during the drying cycle; and
8 opening and closing a motor controlled second valve during the drying cycle to dispense
9 the gas during the drying cycle.

1 8. The process of claim 1, further comprising the steps of:
2 supplying the rinsing fluid through a motor controlled valve to a first nozzle;
3 dispensing the rinsing fluid through the first nozzle;
4 supplying the gas through a motor controlled valve to a second nozzle; and
5 dispensing the gas through the second nozzle.

1 9. The process of claim 1, further comprising the step of:
2 dispensing the gas on the surface of the substrate near the axis of rotation during the
3 drying cycle.

1 10. The process of claim 1, further comprising the steps of:
2 dispensing the gas on the surface of the substrate near the axis of rotation during the
3 drying cycle; and
4 dispensing the gas through a nozzle mounted on a robot arm.

1 11. Apparatus for rinsing and drying a substrate of a semiconductor wafer, comprising:
2 a first nozzle dispensing rinsing fluid against the substrate during a rinsing cycle; and
3 a second nozzle dispensing dry gas under pressure against the substrate during a drying
4 cycle to dry the substrate completely.

1 12. The apparatus of claim 11, further comprising:
2 the first nozzle being mounted on a robot arm that positions the first nozzle during the
3 rinsing cycle; and
4 the second nozzle being mounted on the robot arm that positions the second nozzle
5 during a drying cycle to dry the substrate completely.

1 13. The apparatus of claim 12, further comprising:
2 a microprocessor controlling the robot arm.

1 14. The apparatus of claim 11, further comprising:
2 a motor controlled first valve supplying rinsing fluid to the first nozzle; and
3 a motor controlled second valve supplying rinsing fluid to the second nozzle.

1 15. The apparatus of claim 14, further comprising:
2 a microprocessor controlling the first valve and the second valve.